

CLAIMS:

1. A system (100) for integrative analysis of intrinsic (10) and extrinsic (11) audio-visual data, the system comprising:
 - an intrinsic content analyser, the intrinsic content analyser being communicatively connected to an audio-visual source, the intrinsic content analyser being adapted to search the audio-visual source for intrinsic data and being adapted to extract intrinsic data using an extraction algorithm,
 - an extrinsic content analyser, the extrinsic content analyser being communicatively connected to an extrinsic information source, the extrinsic content analyser being adapted to search the extrinsic information source and being adapted to retrieve extrinsic data using a retrieval algorithm,
 - wherein the intrinsic data and the extrinsic data are correlated, thereby providing a multisource data structure.
2. A system according to claim 1, wherein the retrieval of the extrinsic data is based on the extracted intrinsic data.
3. A system according to claim 1, wherein the extraction and/or retrieval algorithm(s) is/are provided by a module.
4. A system according to claim 1, wherein a query is provided by a user, the query being provided to the extraction algorithm and wherein the intrinsic data is extracted in accordance with the query.
5. A system according to claim 1, wherein a query is provided by a user, the query being provided to the retrieval algorithm and wherein the extrinsic data is retrieved in accordance with the query.
6. A system according to claim 1, wherein a feature reflected in the intrinsic and extrinsic data include textual, audio and/or visual features.

7. A system according to claim 1, wherein the audio-visual source is a film (101) and wherein the extracted data include textual (104), audio and/or visual features (105, 106).
- 5 8. A system according to claim 1, wherein the extrinsic information source is connected to and may be accessed via the Internet (103).
9. A system according to claim 1, wherein the extrinsic information source is a film screenplay (102).
- 10 10. A system according to claim 9, wherein the extrinsic content analyser include knowledge about screenplay grammar, and wherein the extrinsic data is retrieved based on information extracted from the screenplay by use of the screenplay grammar.
- 15 11. A system according to any of the claims 9 or 10 wherein the identification (5) of persons in a film is obtained by means of the screenplay.
12. A system according to any of the claims 9 or 10 wherein a feature in a film is analysed based on information included in the screenplay.
- 20 13. A system according to claim 1, wherein the correlation of the intrinsic and extrinsic data is time correlation (121), thereby providing a multisource data structure where a feature reflected in the intrinsic data is time correlated to a feature reflected in the extrinsic data.
- 25 14. A system according to claim 13, wherein the time correlation is obtained by an alignment of a dialogue (120) in the screenplay to the spoken text (104) in the film and thereby providing a timestamped transcript (121) of the film.
- 30 15. A system according to claim 14, wherein a speaker identification in the film is obtained from the timestamped transcript.
16. A system according to claim 9, wherein the screenplay is compared with the spoken text in the film by means of a self-similarity matrix (30).

17. A system according to claim 1, wherein a high-level information structure (5-9) is generated in accordance with the multisource data structure.
- 5 18. A system according to claim 17, wherein the high-level information structure may be stored on a storage medium.
19. A system according to claim 17, wherein an updated high-level information structure is generated, the updated high-level information structure being an already existing
10 high-level information structure which is updated in accordance with the multisource data structure.
20. A system according to claim 1, wherein the retrieval algorithm is a dynamic retrieval algorithm adapted to dynamically update itself by including additional
15 functionalities in accordance with retrieved extrinsic data.
21. A system according to claim 20, wherein the additional functionalities is obtained by training the retrieval algorithm on a set of features from intrinsic data using labels obtained from the extrinsic data.
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22. A system according to claim 9 and 21, wherein the training is performed using at least one screenplay.
23. A system according to 1, wherein an automatic ground truth identification in a
25 film is obtained based on the multisource data structure for use in benchmarking algorithms on audio-visual content.
24. A system according to 1, wherein an automatic scene content understanding in a film is obtained based on the textual description in the screenplay and the audio-visual
30 features from the film content.
25. A system according to 1, wherein an automatic labelling in a film is obtained based on the multisource data structure.

26. A method for integrative analysis of intrinsic and extrinsic audio-visual information, the method comprising the steps of:
- searching an audio-visual source for intrinsic data and extracting intrinsic data using an extraction algorithm,
 - 5 searching an extrinsic information source and retrieving extrinsic data using a retrieval algorithm,
 - correlating the intrinsic data and extrinsic data, thereby providing a multisource data structure.
- 10 27. A method according to claim 26 further comprising the step of generating a high-level information structure in accordance with the multisource data structure.
28. A method according to claim 26, wherein the extrinsic content analyser include knowledge about screenplay grammar, and wherein the extrinsic data is retrieved
- 15 using information extracted from the screenplay by use of the screenplay grammar.
29. A method according to claim 26, wherein the retrieval algorithm is updated by training the algorithm on a set of extrinsic data.
- 20 30. Computer programme product enabling a computer to be programmed to perform the method according to claim 26.
31. Storage medium carrying the computer programme product according to claim 30.
- 25 32. Programmed computer enabled to perform the method according to claim 26.